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VOICESTREAM E-OTD TRIAL STATUS REPORT

1. Houston E-OTD Trial System

VoiceStream Wireless and Cambridge Positioning Systems Limited (CPS) have been conducting a trial of an Enhanced Observed Time Difference (E-OTD) location system provided by CPS on the VoiceStream Houston GSM network. This trial was designed to explore the accuracy of E-OTD technology, and to provide an operational environment for the further advancement of the technology.

The trial has been running for approximately one year, during which there have been several upgrades to the E-OTD system. These have mostly included revisions to the software components within the system and within handsets. All prior testing has been performed with a prototype test handset. The testing described herein was conducted using four handset types from three different handset manufacturers, and reflects the progression to commercial availability of the handsets. For a number of the handset models, these tests represent the first systematic evaluation of their E-OTD implementations.

This report provides the results from testing conducted in the July-August 2001 timeframe, from 120 test locations including nearly 5000 individual measurements.

The trial area for the Houston trial system is located to the south west of the central Houston, and covers an area in excess of 100 km². The area is predominantly suburban, interspersed with relatively tall (in excess of 10 stories) office buildings. **Figure 1** below shows a map of the Houston trial area. The area was selected as being representative of a general suburban area which, as has been reported to the FCC, represents the type of area where the majority of 911 calls are made on the VoiceStream network.

The tests followed the standard format used by VoiceStream in all E-OTD testing. This format is based on the recommendations of the Office of Engineering and Technology Bulletin No. 71, "Guidelines for Testing and Verifying the Accuracy of Wireless E911 Location Systems" (OET-71). VoiceStream and CPS have adapted the principles outlined in this document to accommodate practical, operational test scenarios:

- 8 individual handsets from 4 models of 3 manufacturers
- 120 random test locations generated across the Houston trial area
- 5 positioning measurements at each of the test locations
- Handset testing in idle mode
- Testing among handsets performed simultaneously for consistency with radio conditions

Figure 1 below shows the 120 test locations and a summary of results. The one hundred twenty test points are depicted below by green, red, and yellow points on the map.

Exhibit B

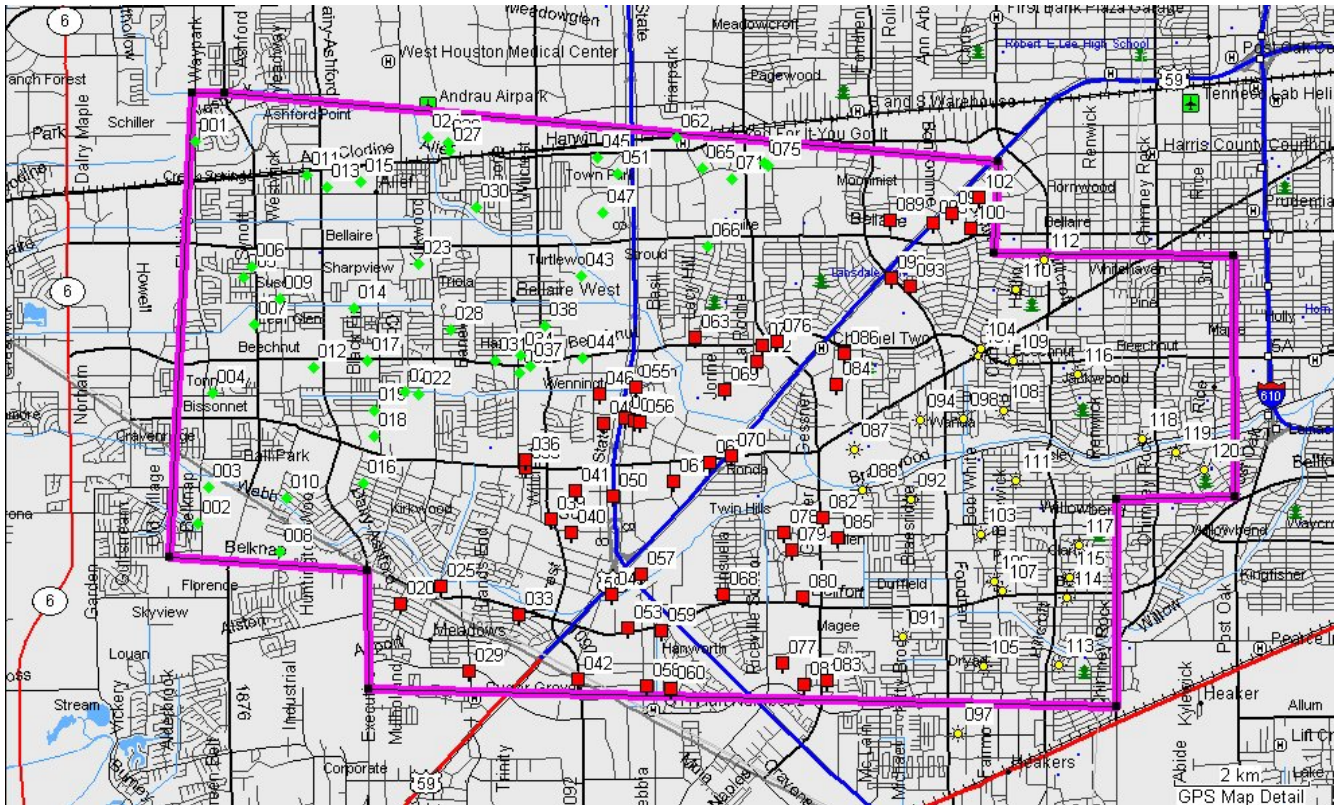


Figure 1 - 120 Test Locations Map

The test results confirm VoiceStream's belief that E-OTD handsets will perform at the sub-100 meter level at E-OTD launch. The mean results across all handsets tested in July-August show performance at the 86 meter level for 67 percent of calls, and 303 meters for 95 percent of calls. **Figure 2** gives a summary of the test results. It is a pyramid structure, with the measurements from the individual handsets forming the base, and the statistics of all tested handsets forming the apex.

EOTD Handset Results from Houston 7/31/01 - 8/7/01

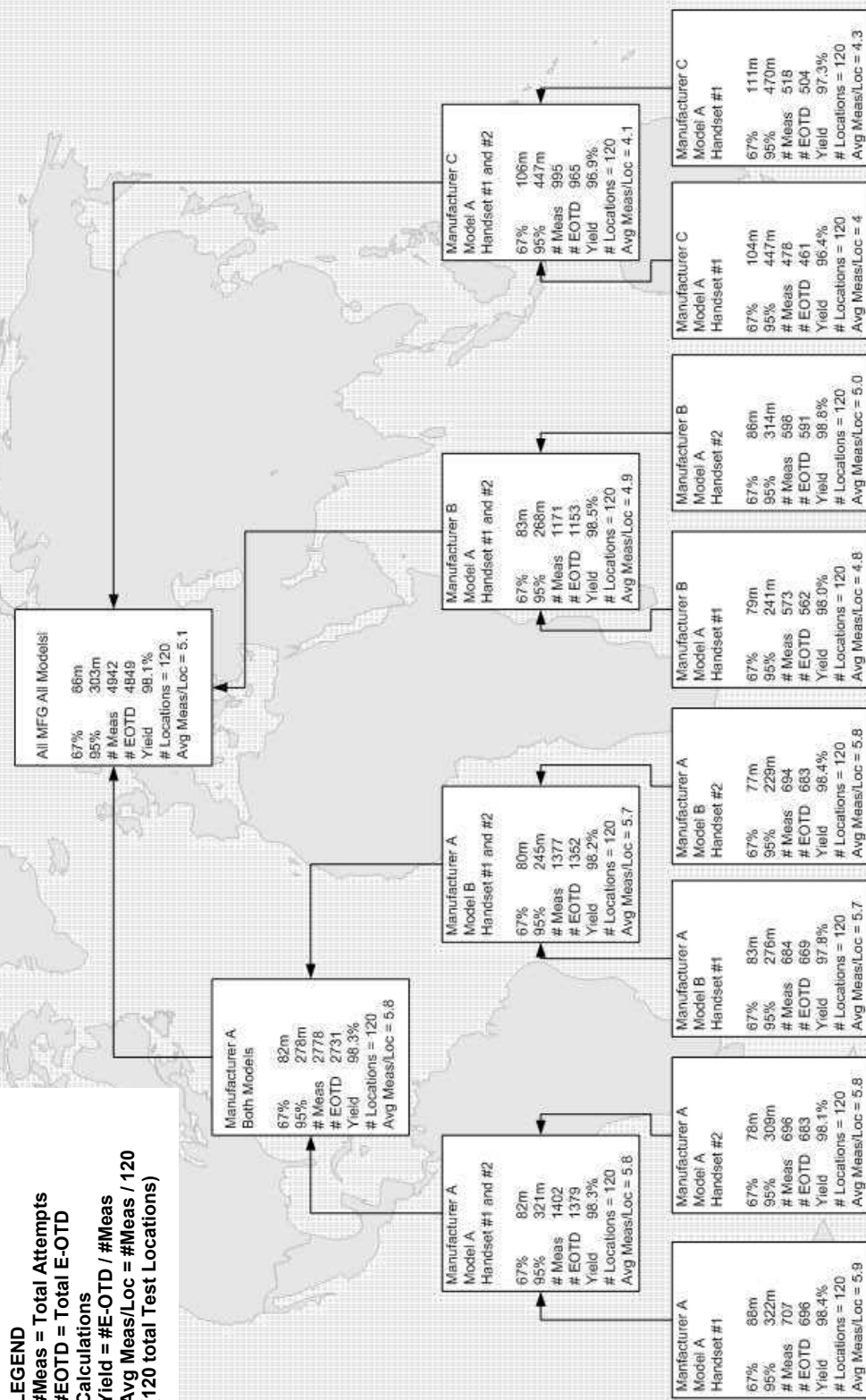


Figure 2 - EOTD Handset Results from Houston

Exhibit B

Figure 3 gives a sample of actual E-OTD test data points at selected test locations.

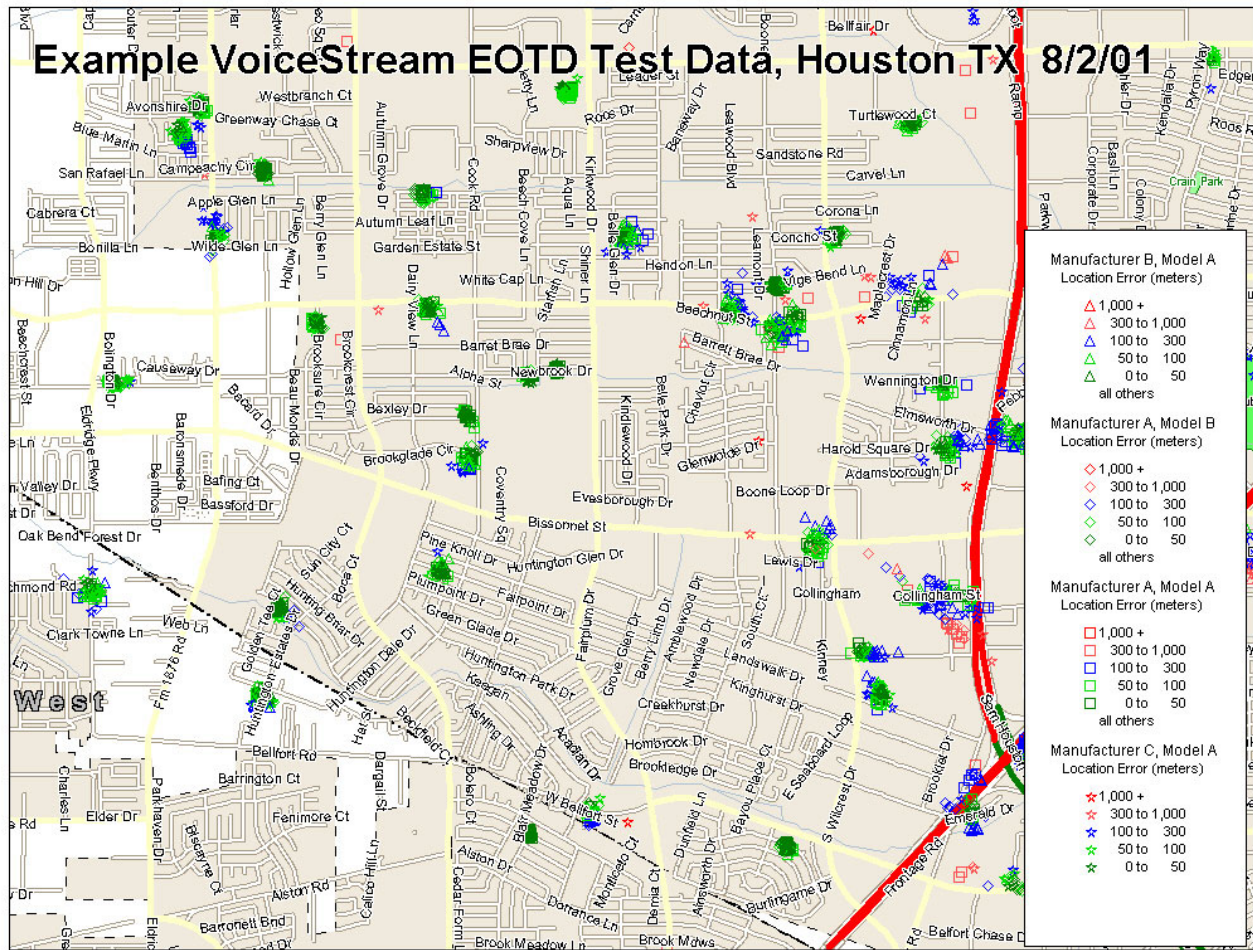


Figure 3 – Example VoiceStream E-OTD Test Data, Houston, TX

VoiceStream has drawn the following conclusions as a result of these most recent tests:

- E-OTD algorithms have been integrated into four handset models with no hardware changes.
- E-OTD can be implemented across many handset models, achieving similar accuracy results.
- E-OTD implementations across the four handset models can achieve initial E-OTD accuracy requirements of the VoiceStream waiver.
- Further improvements to the E-OTD algorithms are in progress to achieve even higher accuracy.

The Houston test network was retired on September 1, 2001, for the following reasons:

- Additional data collected in the Houston suburban environment would not add value to the program.
- The GSM network in Houston began major reconfigurations in September, which added difficulty to maintaining the E-OTD system.

Exhibit B

- VoiceStream's Houston switch was relocated to provide better flood protection in light of recent flooding in the area.
- The Washington D.C. and Seattle WA trial systems would soon be running to test in different types of urban/suburban environments and to provide a stable test bed for continuing E-OTD handset implementations and improvements.

2. Washington, D.C. E-OTD Trial System

The E-OTD trial system being deployed in Washington D.C. is a joint project between Ericsson, CPS, and VoiceStream. Its objectives are as follows:

- Demonstrate the accuracy of E-OTD in an urban environment
- Provide continued support for E-OTD handset development
- Demonstrate and test new improved commercial grade E-OTD infrastructure hardware and software
- Provide important radio frequency (RF) environment information, essential to facilitate the eventual First-Office-Application (FOA) deployment in Washington D.C. by Ericsson.

The trial area consists of the urban and core areas of Washington D.C. Phase I of the trial system will consist of 32 base station sites and LMUs (location measurement units), and cover 76 km². Phase II of the trial system will consist of 50 base stations and LMUs, and cover 129 km². **Figure 4** provides a map of this trial area.

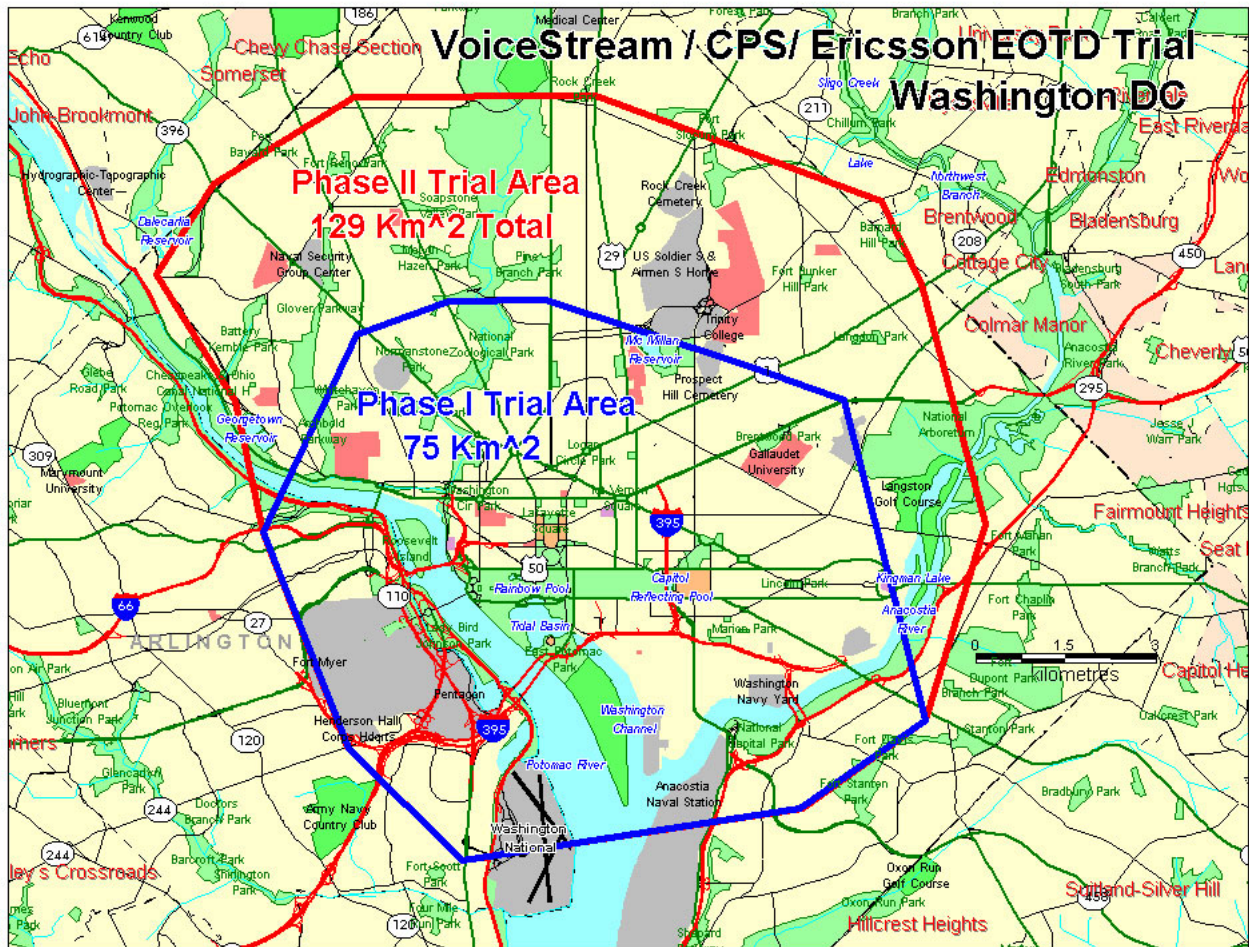


Figure 4 – VoiceStream/CPS/Ericsson E-OTD Trial - Washington D.C.

Significantly, GPS equipment has been added to the LMUs in this trial. This is expected to further stabilize the system and increase accuracy, because GPS can be used as an absolute time reference. This is a significant improvement upon the Houston trial system, where there was no absolute time reference available.

Equipment delays from manufacturers have delayed the initial deployment of the Washington D.C. system. New commercial-grade LMU units have had some design/manufacturing issues, necessitating design changes before trial deployment. This trial represents the first field application of this new equipment for CPS and VoiceStream.

Presently, the antenna systems required for the LMUs have been deployed, and LMU installation began on October 1.

VoiceStream is anticipating that the recent events in Washington D.C. will also slow the deployment of the LMUs, as it is now difficult to access many of the sites, and installation teams cannot follow an optimal installation schedule due to scheduling issues with land owners. Also many of the sites in the trial area are on or very near to U.S. government buildings' rooftops, where new security measures either have suspended VoiceStream's ability to access site equipment or made it increasingly difficult to receive clearance for site work.

VoiceStream will deploy equipment as fast as possible while also following the new security measures and practices being put in place. We anticipated that the system should be commissioned for testing within four to six weeks, depending on the access issues described above.

3. Seattle E-OTD Trial System

VoiceStream is deploying a third E-OTD trial system with Nokia in the Seattle, WA market. **Figure 5** depicts the test area. This trial system will serve as a test bed for accuracy performance in a more difficult RF environment, for handset verification, and for integration and operational issues such as site planning, zoning and leasing.

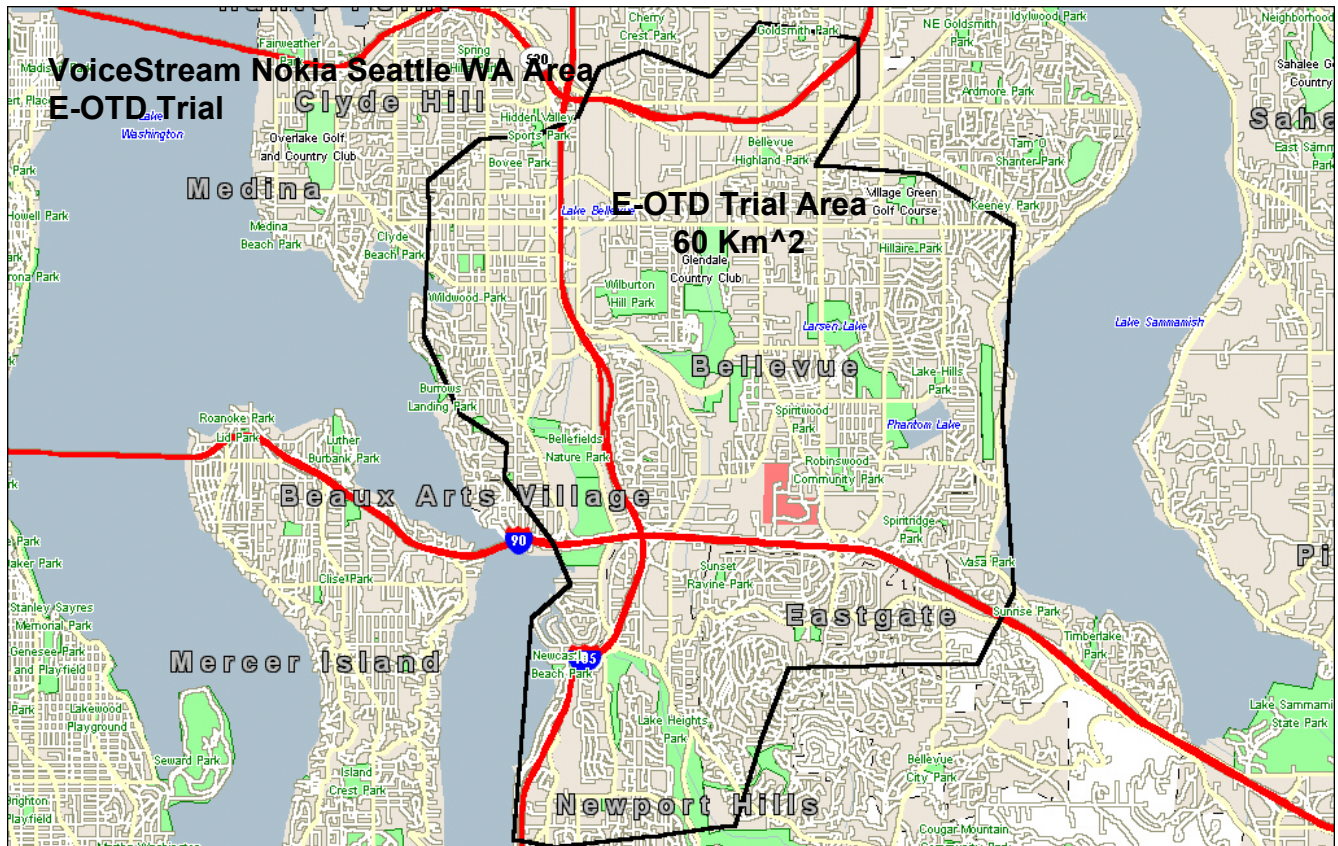


Figure 5 – VoiceStream/Nokia Seattle, WA Area E-OTD Trial

The Seattle trial system will occur in two phases:

- Trial system on development grade hardware (Phase I)
- Trial system on actual commercial hardware/software (Phase II)

Phase I involves Nokia development type LMU hardware, and is being undertaken to determine the accuracy of Nokia's equipment. This system will not follow standardized operations, but will use the same location algorithms to be used in the commercial hardware. Consequently, the Phase I system will produce results very similar to a commercial system, and allow VoiceStream to gauge accuracy. VoiceStream and Nokia will deploy this equipment across 21 contiguous base stations in the Bellevue, WA area (where VoiceStream is headquartered) near Seattle, WA. Phase I installation began on September 26, 2001, and is expected to take about four weeks, barring unforeseen issues.

In Phase II of the trial, Nokia and VoiceStream will be replacing the development LMUs with commercial hardware. This infrastructure will be the actual commercial equipment VoiceStream will purchase from Nokia to meet the E911 Phase II mandate. It will be fully integrated into the existing infrastructure, and the commercial system will use standardized messaging and protocols. We anticipate beginning Phase II of the Seattle trial in December 2001.